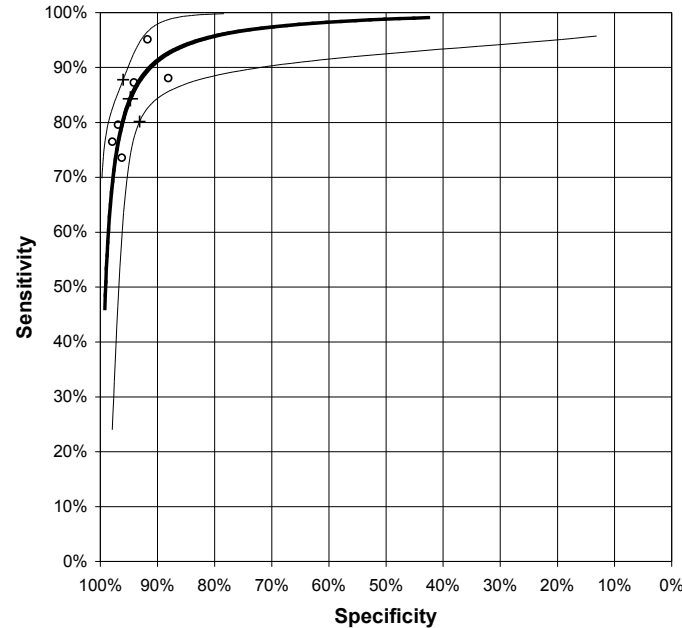


# dr-ROC

diagnostic test meta-analysis software

## Summary ROC

- Summary ROC ON
- Confidence interval ON
- Extended range OFF
- Data points ON
- Excluded studies OFF
- Mean threshold point ON
- Confidence interval ON
- Min, max threshold OFF
- Chance line OFF
- Gridlines ON
- Percentage PERCENT
- Sensitivity/TPR SEN/SPEC
- Indicated point OFF



## Easy to use...

Data analysis options are set using simple pull-down menus on the same page as data entry—no fumbling with complicated programmers' syntax or trying to remember code letters.

Graph options are set with check boxes right next to the graphs.

Sample An ID	TP	FN	FP	TN	Group	Weight	Quality
Ragh 1986	14	5	1	6	1	1	9
Aiken 1987	15	4	3	26	1	1	7.5
Lensing 1989	66	4	25	149	1	1	7
Monreal 1989	40	2	8	22	1	1	8.5
Appleman 1987	48	5	9	58	1	1	6
Borris 1989	15	9	2	34	2	1	6
Monreal 1989	3	3	1	32	2	1	6
Froelich 1989	5	0	1	34	2	1	6

<b>Weighting</b>	<input type="text" value="N"/>	<b>Label Studies</b>	<input type="text" value="Name"/>
<b>Continuity Correction</b>	<input type="text" value="Only studies with zero"/>	<b>One-Dimensional Analyses</b>	<input type="text" value="Exclude excluded studies"/>
<b>Regression</b>	<input type="text" value="Not constrained"/>	<b>Label graphs</b>	<input type="text" value="Some"/>
<b>Prevalence</b>	<input type="text" value="Pooled"/>	<b>Table</b>	<input type="text" value="Exclude excluded studies"/>
<b>Confidence Interval</b>	<input type="text" value="95%"/>		
<b>Sort</b>	<input type="text" value="As entered"/>	<input type="text" value="Normal"/>	
<b>Additional Warnings</b>	<input type="text" value="Off"/>		

maximum 25 studies—for additional capacity use dr-ROC 100. 2.0d31

No error messages

## ... yet incredibly powerful

dr-ROC offers more analysis options than any other diagnostic test analysis program

- Weight the summary ROC by study size, inverse variance, quality score, or other user-specified value; or choose unweighted analysis.
- Apply continuity correction to all studies, or just those studies with a zero value.
- Plot summary ROC, fixed-effects, or random-effects results
- Specify 95% or any other confidence interval you wish
- Include or exclude studies from the meta-analysis without having to retype the data ... and more!

dr-ROC does more analyses than other software—all in one program to save you time and trouble.

- Sensitivity and specificity at mean threshold, with confidence intervals
- Q\*—sensitivity and specificity on the diagonal where the two are equal
- Area under the ROC, and area under the upper left quadrant of the ROC
- Heterogeneity tests: Cochran's Q, p(Q), i<sup>2</sup>
- Subgroup analyses
- Diagnostic odds ratio and confidence interval for fixed-effects, random effects, and SROC
- Pooled sensitivities and specificities with confidence intervals
- Spearman and Pearson correlations between sensitivity and specificity, r<sup>2</sup> calculation

**Version 2.0 now available More analyses! New graphs!**

- **New fixed-effects and random-effects analyses**
- **New pooled sensitivity and specificity results**
- **New correlation analysis**
- **New sensitivity and specificity forest plots**
- **Still the same user-friendly interface**



**Diagnostic Research Design & Reporting**  
**www.dr2consulting.com**

## New in Version 2.0

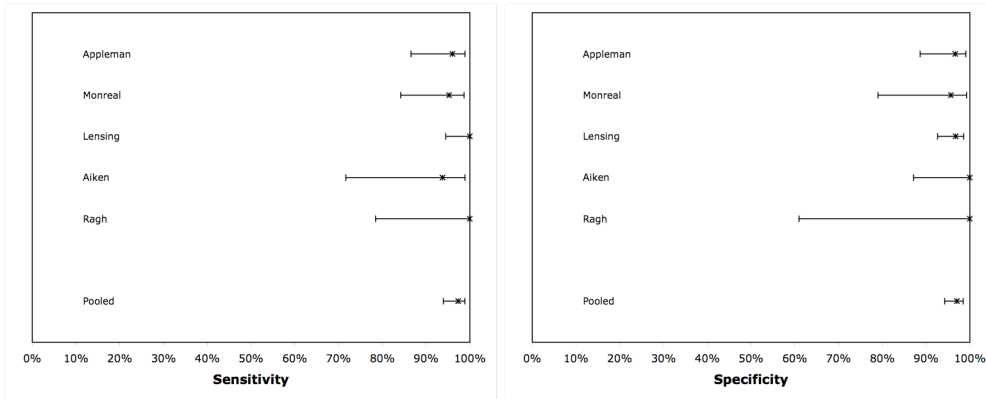
*You asked for it, dr<sup>2</sup> delivers! dr-ROC version 2.0 includes more analyses, more graphs, and more results, to save you time while helping you better understand your data.*

### New analyses

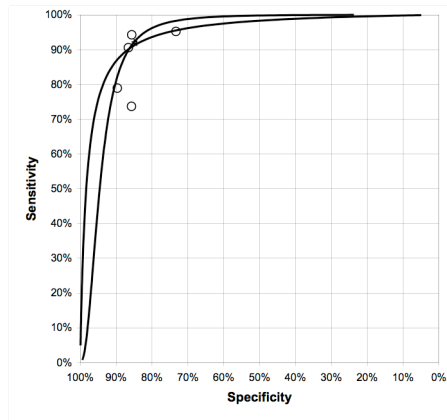
- Fixed-effects (Mantel-Haenszel) and random-effects (DerSimonian-Laird) meta-analysis of diagnostic odds ratios
- Pooled sensitivity and specificity with confidence interval
- Spearman and Pearson correlations of sensitivity and specificity.

### New graphs and features

- Forest plots of study-by-study sensitivity and specificity
- ROC plot comparing summary ROC, random-effects, and fixed-effects meta-analysis results
- Options to show random-effects and/or fixed-effects results on summary ROC and logit plots.

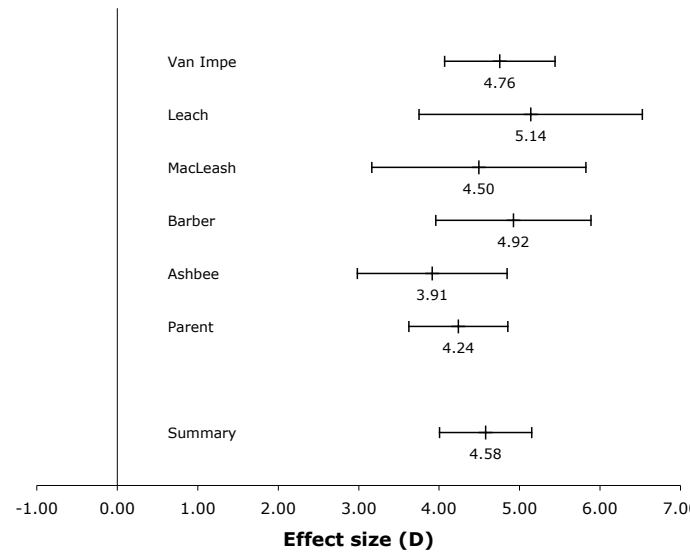
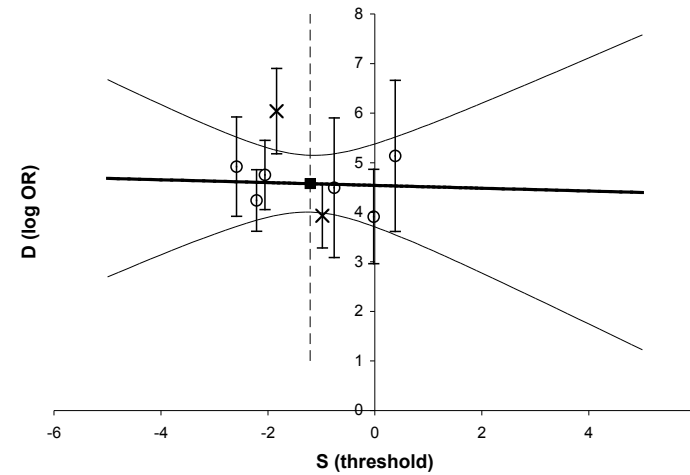


*New sensitivity and specificity forest plots*



*Compare fixed-effects and summary ROC meta-analyses*

## Manuscript-ready graphs with flexible options



### Pre-formatted graphs: just click

dr-ROC includes seven pre-formatted graphs. All of them have a set of check boxes to display or hide graph components, or change graph characteristics. See an example on the front cover of this brochure. Then just click “Go” to redraw the graph.

If you want to compare the excluded studies to the studies included in your meta-analysis, just click. dr-ROC will mark studies with Xs and Os (see logit plot example above left).

Other one-click options let you sort tables and figures by author name, study size, or other characteristics; or display analysis title and parameters on the graph—no more wondering which graph is which!

### Tables too!

Get a clear and complete table of results every time. Line breaks and punctuation are already done for you— just paste the table into your Microsoft Word manuscript. Customize the table by selecting the study identifier and sort order you need, and cutting the columns you don’t need.

## System requirements

dr-ROC is Windows and Macintosh compatible. A copy of Microsoft Excel is required: supported versions include Excel 2003, Excel 2002, and Excel 2000\* for Windows and Excel 2004 and Excel v.X for Macintosh. Pre-formatted results table requires any current edition of Microsoft Word.

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